MEI

Lead Free RoHS Compliant

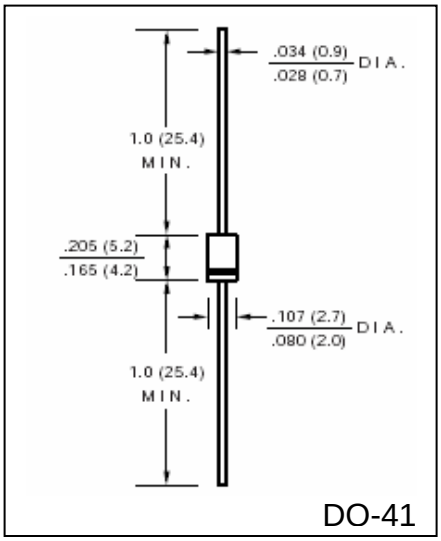
GENERAL PURPOSE RECTIFIER

BY127 THRU BY133

VOLTAGE RANGE **1250 to 1300 Volts**
CURRENT **1.0 Ampere**

FEATURES

- High reverse voltage
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capacity
- High temperature soldering guaranteed: 260 /10 seconds, 0.375" (9.5mm) lead length



MECHANICAL DATA

- Case: transfer molded plastic
- Epoxy: UL94V – 0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: any
- Weight: 0.012 ounce, 0.33 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25^{O}C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	BY127	BY133	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1250	1300	Volts
Maximum RMS Voltage	V_{RMS}	875	910	Volts
Maximum DC Blocking Voltage	V_{DC}	1250	1300	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) lead length at T_A = 75^{O}C (Note 1)	$I_{(AV)}$	1.0		Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	30		Amps
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.1		Volts
Maximum DC Reverse Current at Rated T_A = 25 ^{O}C	I_R	5.0		µA
DC Blocking Voltage per element T_A = 100 ^{O}C		50		
Maximum Full Load Reverse Current, full cycle Average 0.375" (9.5mm) lead length at T_L = 75 ^{O}C	$I_{R(AV)}$	30		µA
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	15		pF
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50		^{O}C/W
Operating Junction Temperature Range	T_J	(-65 to +175)		^{O}C
Storage Temperature Range	T_{STG}	(-65 to +175)		^{O}C

Notes:

Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted

RATINGS AND CHARACTERISTIC CURVES BY127 THRU BY133

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

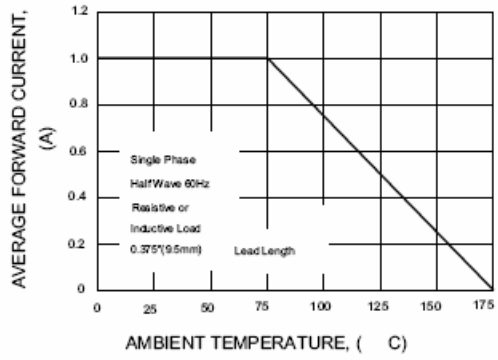


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

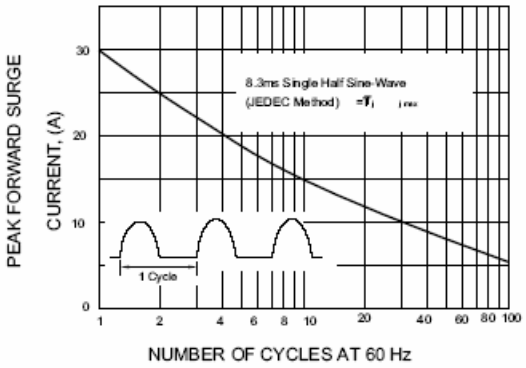


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

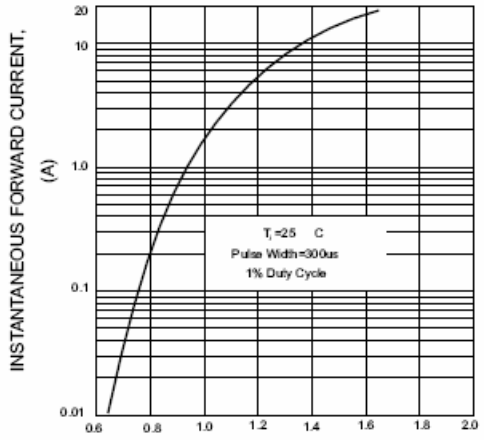


FIG.4-TYPICAL REVERSE CHARACTERISTICS

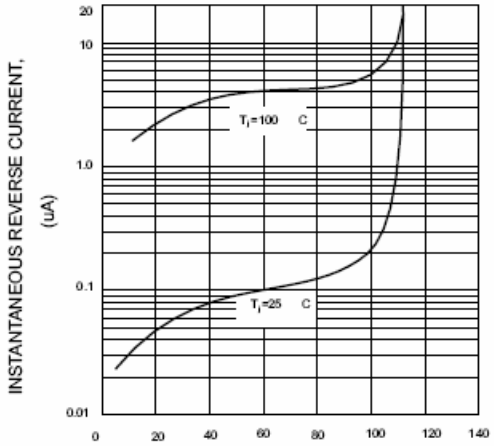


FIG.5-TYPICAL JUNCTION CAPACITANCE